

Marine Scotland's Enforcement of Acoustic Deterrent Devices

Case Reference IESS.21.021

August 2022

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Executive Summary

Acoustic Deterrent Devices (ADDs) are used in the aquaculture industry to prevent seal attacks at fin fish farms, but these devices can also disturb European Protected Species (EPS) such as dolphins and porpoises. These species are protected under the Conservation (Natural Habitats, &c.) Regulations 1994 ("the 1994 Regulations"). Under the 1994 regulations, an ADD which disturbs protected species can only be used if the operator has obtained an EPS licence.

In November 2021, Environmental Standards Scotland (ESS) received a representation regarding Marine Scotland's duties to ensure that the aquaculture industry complies with the 1994 Regulations. The representation expressed concerns that fish farm operators have been using ADDs without a licence, and queried the sufficiency of Marine Scotland's investigation and enforcement actions to stop such practices.

Since the representation was received, Marine Scotland appears to have entered into a new phase of enforcement work and is moving beyond relying on the aquaculture industry to self-regulate. Marine Scotland have recently completed an ADD Compliance Plan and initiated inspections of fish farms in early 2022. In November 2021, a Scottish Government Aquaculture Code of Practice (published in September 2021) became subject to the enforcement powers provided in the Aquaculture and Fisheries (Scotland) Act 2007. This tightened the requirements on fish farm operators to apply for an EPS licence or prove a licence is not required, if they intend to use an ADD.

Following our review of the representation, ESS engaged with Marine Scotland to scrutinise their Compliance Plan and supporting information to determine whether these are likely to provide an outcome which protects EPS in line with the requirements of the 1994 Regulations. ESS made recommendations and requests to Marine Scotland and received responses, as follows:

- To clarify uncertainties and ambiguities in the information presented, to which ESS received acceptable responses.
- To update their enforcement strategy to maintain scrutiny on fish farms where ADDs were present but not in use at the time of inspection. Marine Scotland's revisions were to our satisfaction.

 To commit to publicly-released, periodic reporting on the inspection works, to allow scrutiny and transparency on their progress and specific actions undertaken. Marine Scotland's proposal for such reporting was reviewed by ESS and deemed satisfactory.

In completing the above, ESS considers that informal resolution has been achieved, as Marine Scotland has taken reasonable corrective actions in response to our comments and ESS presently has no remaining concerns on the design of the Compliance Plan and their proposed approach. ESS therefore does not consider it necessary to undertake formal investigation of Marine Scotland for these matters. Ultimately, the effectiveness of the enforcement works and Marine Scotland's compliance with environmental law will be demonstrated by their actual delivery of the enforcement works, which ESS will continue to monitor.

Section 1: Background

1.1 Introduction

This report is issued following ESS' work in response to a representation received regarding Marine Scotland's duties to prevent illegal use of Acoustic Deterrent Devices.

This report summarises the information reviewed, our assessments, our discussions with Marine Scotland, and the outcome of resolution works. ESS thank Guy Linley-Adams Solicitor, acting for the Coastal Communities Network, who submitted their representation to ESS, and Marine Scotland for their cooperation.

1.2 Background

What is an ADD?

Acoustic Deterrent Devices and Acoustic Startle Devices (collectively referred to as "ADDs") have been used in the aquaculture industry to prevent seal attacks at fin fish farms. ADDs are devices which introduce underwater sound; these can use different frequencies and tones to unsettle an approaching seal, or use sound pressure to cause discomfort to seals at close range. ADDs may emit sound continuously or intermittently. Beyond those used in the aquaculture sector, ADDs can be deployed to protect marine life from risks associated with underwater construction works and off-shore wind farms, and to repel non-target species from fishing nets.

Widespread ADD use has been reported for Scottish fish farms in the past. In 2017, it was determined by Scottish National Heritage ("SNH", now known as NatureScot) that 121 of 171 Scottish fish farms used ADDs. A March 2021 Parliamentary Report titled *Acoustic Deterrent Device (ADD) Use in the Aquaculture Sector* provided further details on the variations in ADD use per year between 2014 and 2019, noting in 2018 that the number of fish farms using ADDs increased to 155. The report noted ADD use is dynamic and continues to evolve.

Review of the impacts of ADDs on cetacean species

ADD can cause disturbance to cetacean species (including whales, dolphins and porpoises) but it is not assumed that all ADDs can disturb all cetacean species due to

there being a range of these devices which operate using different frequencies and patterns. As such, the findings from a scientific study of a specific device may not be applicable to a different device.

Salmon Scotland, formerly known as the Scottish Salmon Producers Organisation (SSPO) has previously contested the disturbance caused by ADDs and considered their use of more modern devices (which operate at a lower frequency) as suitable. SSPO's claims of ADDs not disturbing cetaceans were contested by multiple Non-Governmental Organisations (NGOs) and scientists. SNH has expressed concerns over the risks of ADDs to cetaceans over multiple reports. A 2014 report commissioned by SNH states "the risk that ADDs at Scottish aquaculture sites is causing permanent hearing damage to marine mammals cannot be discounted." SNH in 2017 considered ADDs can disturb and cause the displacement of cetaceans, and that hearing damage, stress, and masking (obscuring underwater acoustic communications between animals) could not be discounted.

While numerous studies on the effects of ADDs are available, reviewing these in detail was not considered necessary. This is due to the current regulatory framework (discussed below) assuming disturbance unless proven otherwise. Potential disturbance needs to be characterised on a site-specific basis in the instance of a license application or a submission to prove an EPS licence for an ADD is not required for a fish farm. As discussed later in this report, no EPS licences have been granted and no submissions have been accepted to date.

Legislation

EPS, which include cetaceans such as dolphins, porpoises and whales, are protected under the 1994 Regulations (as amended), which is the legislation which transposed the EU Habitats Directive into domestic law. In Scotland, Regulation 39 makes it an offence to deliberately or recklessly disturb any cetacean species. EPS Licences allow activities which would otherwise be unlawful (e.g. disturbing a cetacean species), but the 1994 Regulations state that appropriate authority shall not grant a licence under this regulation unless they are satisfied –

(a) that there is no satisfactory alternative, and

(b) that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Beyond the requirement to issue marine EPS licences, Marine Scotland (on behalf of Scottish Ministers) is the regulator responsible for ensuring compliance with the provisions of the 1994 regulations. In written correspondence to the aquaculture industry, Marine Scotland have themselves acknowledged that they have a duty to ensure that the 1994 Regulations are being complied with, including the use of ADDs.

In September 2021, the Scottish Government published Aquaculture Code of Practice - Containment of and Prevention of Escape of Fish on Fish Farms in relation to Marine Mammal Interactions, and in November 2021 this Code became subject to the enforcement powers provided in the Aquaculture and Fisheries (Scotland) Act 2007. This is another legal mechanism for pursuing compliance, and states that an operator who plans to deploy an ADD must "consult Marine Scotland and obtain any relevant consents" or "demonstrate to Marine Scotland that the planned use will not harm marine mammals." Non-compliance with this Code can constitute a criminal offence under the 2007 Act.

EPS licensing in practice and past compliance works

Prior to 2022, Marine Scotland's approach to ensuring compliance with the EPS licensing requirements of the 1994 Regulations appeared to place the onus on the aquaculture industry to self-determine whether the ADDs in use disturb cetacean species and whether they required an EPS licence. Correspondence and advice notes issued from Marine Scotland to the aquaculture industry include the following:

- Marine Scotland guidance document titled "The protection of Marine European
 Protected Species from injury and disturbance" dated July 2020 After giving
 advice on how to conduct a risk assessment (to be carried out by the fish farm
 operators), the guidance states "once you have undertaken your cetacean risk
 assessment, you will now be at a stage to determine your need for a licence."
- Marine Scotland letter dated 30 July 2020, subject: "Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) Acoustic Deterrent Devices use at Scottish finfish farms" Where ADDs are currently used, or planned to be used at finfish

farms, operators should establish whether the use of ADDs could constitute an offence, and apply for a licence if the operators deem it to be a requirement.

- Marine Scotland Information Note and Frequently Asked Questions Version 4 dated December 2020 "It is your responsibility as the fish farm operator to determine whether you need to apply for an EPS licence. However given current scientific advice, it is likely that an EPS licence will be required for all currently available ADDs unless you can demonstrate that the device(s) operating at your site will not cause disturbance to cetaceans."
- Marine Scotland letter dated 05 October 2021, subject: "Conservation (Natural Habitats, &C.) Regulations 1994 (as amended) (1994 Regulations) European Protected Species Use of Acoustic Deterrent Devices at Fish Farms" "Where a fish farm operator (operator) wishes to use ADD(s), the operator must undertake a full review to determine whether or not an EPS licence may be required for such use in accordance with the 1994 Regulations. It is the operator's responsibility to determine, in light of such a review, whether they should apply for an EPS licence." This letter further requests that the operators submit evidence that their chosen device does not need an EPS licence, and states that those operators who do not provide sufficient evidence "may be subject to a visit from Marine Enforcement Officers, who will require the evidence to be provided."

No EPS licences have been granted to fish farms to date and although applications have been submitted, these were all subsequently withdrawn prior to April 2021. In Marine Scotland's most recent update (May 2022) to ESS, they confirmed that no EPS licence applications had been received subsequent to April 2021, nor had any operator provided a submission to demonstrate that an EPS licence was not required for an ADD.

Section 2: The Representation

2.1 Summary of the representation

The original representation, submitted to ESS in November 2021, was submitted by Guy Linley-Adams Solicitor, acting for the Coastal Communities Network. It is summarised as follows:

- ADDs can disturb cetaceans despite claims to the contrary by the SSPO and ADD manufacturers.
- There is a possibility that ADDs are effectively un-licensable under the 1994
 Regulations as it requires proof there are no alternatives to ADDs, yet other alternatives, such as anti-predator nets, exist.
- Marine Scotland's inaction to date in policing ADDs is speculated to be influenced by the inability to lawfully issue EPS licences, and the Scottish Government's ambitions to expand the aquaculture industry.
- Marine Scotland has, to date, placed the onus on the aquaculture sector to selfdetermine whether they consider their ADDs to disturb cetaceans and to apply for an EPS licence if so. No EPS licences have been granted to date, and licence applications made between October 2020 and March 2021 were subsequently withdrawn.
- Marine Scotland has a proactive duty to ensure that the 1994 Regulations are being complied with, including the use of ADDs. However, to date, they have not required the aquaculture sector to apply for EPS licences, submit proof that the ADDs in use are not harmful to cetaceans, forced any farm to stop using ADDs, or carried out any compliance inspections. Marine Scotland are therefore failing in their duties.

Supporting information was included with the representation, including:

- Correspondence with parties including Marine Scotland, SNH/NatureScot, and aquaculture industry contacts
- Twelve scientific papers/reports on ADDs published between 2012 and 2021

- Guidance documents from statutory authorities on ADDs and legislation including:
 - o 2007 European Commission (EC) guidance on protection of species
 - 2012 EC guidance on Aquaculture and Natura 2000
 - 2014 Marine Scotland guidance of protection of EPS
 - 2019 SNH guidance on use of ADDs in SAC
 - 2020 Marine Scotland guidance on protection of EPS
 - 2020 Marine Scotland information note and FAQ on ADDs and the requirement for an EPS licence
 - 2021 UK Government guidance on the duty to protect, conserve, and restore European sites
- Scottish parliamentary report on ADD use in the aquaculture sector (March 2021)
- SG Parliamentary questions responses:
 - Dated 2020 providing a breakdown on fish farms known to use ADDs
 - Dated 2021 on the lack of granted EPS licences
- Meeting minutes:
 - November 2019 Marine Scotland / SNH meeting
 - October 2018 Marine Scotland meeting
- May 2020 statement on the use of ADDs in the aquaculture industry

ESS received a supplementary letter from Guy Linley-Adams Solicitor in April 2022, which:

- Presented concerns that no action was taken by Marine Scotland when evidence of unlicensed ADD use was submitted by a third party, as Marine Scotland concluded they could not prove disturbance to a protected species.
- Discussed the impracticalities of requiring proof of disturbance (e.g. the difficulties in proving cetacean species were present and disturbed at the time of ADD operation).
- Queried why disturbance cannot be assumed based on factors such as the strength of the ADD signal and cetacean migratory habits.
- Presented the changes to Marine Scotland's Reporting Form MMR 01 v1 ("Use of Non-lethal Marine Mammal Containment Measures including Acoustic Deterrent Devices (ADDs) at Finfish Farms") from the consultation version (which asked for

details of ADD types and usage, and requires submissions every three months) to the final version (which asks only whether ADDs are used, and requires yearly submissions). The contact expressed concerns that Marine Scotland acquiesced to objections by the industry in revising this form, and that the consultation version would have been more effective to inform enforcement activities.

2.2 Engagement of ESS' remit

In review of the representation and in consideration of ESS' duties given in the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021, ESS considered this case to be within our remit, due to the following factors:

- The representation relates to a public authority Marine Scotland.
- The representation relates to environmental law primarily the 1994 Regulations.
- Marine Scotland's actions, as described in the representation, may constitute a failure to comply with environmental law.
- The representation contact had attempted to engage Marine Scotland for resolution to these matters but was not satisfied with the outcome.

Section 3: Evaluating Compliance and Effectiveness of Environmental Law

3.1 ESS powers of investigation relating to environmental law

Per the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021, ESS can investigate:

- Whether a public authority is failing (or has failed) to comply with environmental law.
- The effectiveness of environmental law or of how it is (or has been) implemented or applied.

The following sections present the assessments carried out by ESS to determine whether either of the above apply.

3.2 Compliance with environmental law

The parties most obviously in non-compliance with the 1994 Regulations are the fish farm operators using ADDs which disturb cetacean species without a licence; however these are not public bodies and it is not within our remit to investigate them. Marine Scotland's possible lack of enforcement over ADD use is within our investigation remit. At high-level, Marine Scotland have themselves acknowledged that they have a duty to ensure that the 1994 Regulations are being complied with, including the use of ADDs; ESS agrees this is the responsibility of Marine Scotland.

In their past actions, Marine Scotland has, to a degree, taken account of environmental laws relating to ADD use and the protection of EPS in their guidance/policy notes and correspondence issued to the aquaculture industry. They correctly identify that it is the operator's responsibility to apply for a licence where an ADD may disturb cetacean species, but still acknowledge that they have a duty to ensure that the 1994 Regulations are being complied with, including the use of ADDs. The way they previously carried out their duties was in a manner that was criticised in the representation – e.g. notifying and reminding the aquaculture industry that it was their responsibility to be compliant with the 1994 Regulations, but not actively enforcing compliance (essentially resulting in the industry self-regulating). There are signs that widespread, illegal, ADD use persisted in the

past, which may have been mitigated sooner had Marine Scotland taken more action to exercise their high-level duty to ensure compliance.

As of November 2021, Marine Scotland have a clear legal responsibility to monitor compliance with the approved September 2021 Aquaculture Code of Practice, which has requirements for ADD operators to gain consents from Marine Scotland. In this regard, they have taken account of their duty to monitor compliance in creating their Compliance Plan. Marine Scotland confirmed that compliance inspections were initiated in early 2022.

As Marine Scotland has recently begun a new strategy following a newly-enacted Compliance Plan it would be, in our view, disproportionate to consider any alleged past failings relating to their compliance and/or the effectiveness of their implementation. Any formal actions taken by ESS to secure the compliance of a public authority (e.g. issuing a compliance notice) would apply to changing future actions, e.g. revising procedures. In considering the recent evolution of the legal framework and Marine Scotland's recently-initiated Compliance Plan, ESS considers it more appropriate to evaluate whether there are any identifiable or foreseeable issues which ESS believe could lead to a failure to comply with environmental law. To accomplish this, ESS has reviewed Marine Scotland's current strategy, as discussed in Section 4 of this report.

3.3 Effectiveness of environmental law

This November 2021 legal update appears to have closed a gap by providing a direct, legal reference which requires operators to submit information demonstrating non-harm to EPS if they are operating an ADD in the belief it does not require an EPS licence. To put this in context, it is clear from the 1994 Regulations that an ADD which is known to disturb EPS cannot be legally operated without an EPS licence. However, operators who were using newer ADDs promoted as not disturbing to cetacean species (either by manufacturers' claims or studies) were not required (under the previous legal framework) to submit their evidence that no licence was needed, even though Marine Scotland had requested this from the industry.

Our assessments have not identified any clear deficiency in the current legal framework which hinders Marine Scotland from carrying out their statutory duties.

Section 4: Review of the Information Provided

4.1 Information requests

Following our preliminary review of the representation, ESS determined it would be appropriate to approach Marine Scotland with queries under Section 23(1) of the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021, to ascertain the status of their Compliance Plan, inspection timescales, and proposed actions they will take on parties operating ADDs which disturb cetacean species. Through these queries, ESS sought to determine:

- If Marine Scotland have a sufficient strategy in place to ensure compliance; and
- Whether satisfactory resolution will occur in a reasonable timeframe.

ESS issued our queries to Marine Scotland in a letter dated 20 December 2021. In their letter dated 19 January 2022, Marine Scotland provided us with responses to our queries and a copy of their Compliance Plan.

4.2 Commentary provided by Marine Scotland

Beyond provision of the Compliance Plan, Marine Scotland provided commentary on their wider enforcement approach and responses to our specific queries. The following salient points are noted:

- The selection of individual farms for inspection would follow a risk-based approach.
 Marine Scotland's Risk and Intelligence team task their assets based on risk. They noted risk would be influenced by the quality and quantity of intelligence received and the potential impact on the marine environment.
- Any farm which Marine Scotland officers observe to be using an ADD without a
 licence will receive an enforcement letter which will require the operator to provide
 necessary submissions within a short period. The letter will additionally require the
 operator to switch off the ADDs unless Marine Scotland determines that a licence is
 not needed or grants an EPS licence.

 Marine Scotland did not have any target dates for completion due to "the dynamic and ongoing nature of this process" noting that "enforcement will continue to be undertaken on an ongoing basis based on risk and intelligence."

While ESS understands that, in appropriate circumstances, risk-based approaches (which rely on intelligence) to carry out targeted compliance inspections, as opposed to systematically visiting all farm sites, can be used, ESS noted uncertainty whether sufficiency of investigation and enforcement actions will be carried out to support widespread compliance. In lieu of target completion dates or milestones, ESS had concerns that any delays in inspections and enforcement could allow ongoing harm to EPS. These concerns were brought forward to discussions with Marine Scotland (See Section 5 of this report).

4.3 Evaluation of the Compliance Plan

Marine Scotland provided us with a copy of their Compliance Plan for review in accordance with the cooperation obligation under section 23(1) of the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021, but requested that it is not released to the public due to its containing sensitive aspects of their work. Furthermore, Section 40(1) of the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021 prohibits ESS from disclosing information obtained using Section 23(1) of this Act, unless an exception given in Section 40(2) applies. In this instance, ESS considers it appropriate to not disclose the Compliance Plan in full, and this report does not include any details of the Compliance Plan which are not required to adequately reason our decision.

Relevant to our assessment works and subsequent discussions, the following points were noted in our review of the Compliance Plan:

 While the Compliance Plan has welcome aspects of enforcement policies to be applied once Marine Scotland observes an unlicensed ADD in use, ESS noted uncertainty on how proactive they will be in collecting or responding to intelligence. ESS were uncertain whether evidence of ADD use submitted by a third party would trigger enforcement actions or the weight such evidence would be given in Marine Scotland's risk-based approach to prioritising sites for inspection.

- If an unlicensed ADD is observed in use by Marine Scotland and an enforcement letter is issued with no response, it would still require a repeat observation of the ADD being in use in a follow-up inspection before legal enforcement actions would be taken. If the ADD is not observed in use in this second visit, then the case would fall to "no further action" as per the Compliance Plan process chart. ESS considered there to be a potential risk where an intermittent-use ADD or one temporarily switched off during the second visit could allow an operator to escape enforcement actions.
- The plan notes that in a 2021 survey, 13 farms reported ADD use to Marine Scotland; however, the document did not provide a specific plan of action for these sites, or an indication that these would be prioritised for inspection.
- In lieu of proposed metrics or target milestones in the plan, ESS could not independently determine the likelihood of meaningful change in a reasonable timeframe.
- The plan did not discuss publishing the progress or outcome of the enforcement works. In lieu of this, it would be difficult for ESS and the public to monitor progress.

4.4 Summary

While ESS welcomed the responses provided by Marine Scotland to our Section 23(1) request, these alone did not provide us with sufficient confidence that Marine Scotland would deliver their duty to prevent unlawful use of ADDs by the aquaculture industry in a reasonable timeframe. ESS therefore approached Marine Scotland to discuss our concerns, and began the process of working towards informal resolution.

Section 5: Informal Resolution Process

5.1 Meetings between ESS and Marine Scotland

Following receipt of Marine Scotland's Compliance Plan and their responses to our Section 23(1) queries, a first meeting was held between ESS and Marine Scotland's Head of Enforcement Standards and Operational Assurance on 3 March 2022, to relay our concerns over the Compliance Plan and to ask further questions related to existing uncertainties. As a result of this meeting, Marine Scotland agreed to revisions of the Compliance Plan (to tighten some enforcement procedures in response to our concerns) and to formulate a public reporting / update strategy (in response to our concerns over lack of transparency and milestones). In addition to this, it was agreed that ESS would issue an additional set of queries to Marine Scotland to allow a formal response to the uncertainties discussed during this meeting. Subsequent meetings were held with Marine Scotland on 25 March and 14 April 2022, as our proposed queries were refined in this period following further review and research by the ESS Investigations Team.

During these meetings, Marine Scotland also provided verbal updates on findings in the recently-completed compliance inspections of fish farms. On 25 March 2022, they advised that in all fish farms inspected in the Firth of Clyde, no ADDs were seen in operation; these were either no longer present or disconnected if still present. As of 14 April 2022, Marine Scotland advised that they were mobilising their vessels and equipment to begin inspections in a new geographical area where fish farms are more concentrated.

Marine Scotland confirmed during each meeting that no EPS licence applications or modelling had been received.

Additionally, in the 25 March 2022 meeting, Marine Scotland provided an update on the conclusion of their investigation into ADD monitoring data submitted by a third party in 2021, noting the following:

- Recordings of ADD use at multiple fish farms were submitted to Marine Scotland, who analysed the data and considered whether they could take enforcement action based on the evidence.
- Marine Scotland concluded they could not judge whether protected species were disturbed based on the submissions.

- Their interpretation of the 1994 Regulations was that they could not initiate enforcement unless they could prove actual harm to protected species.
- They considered that, given a different regime applies now, that if a similar submission was provided presently, different standards would apply.

5.2 Queries to Marine Scotland

Our supplemental queries were issued to Marine Scotland on 14 April 2022. These queries related to the following uncertainties or concerns:

- Operators caught using an ADD could potentially escape enforcement if the ADD was temporarily not operating at the time of a second inspection;
- There not being a specific strategy in the Compliance Plan for the operators who confirmed ADD operation at 13 specific farms in a 2021 survey;
- Why Marine Scotland could not initiate enforcement on farms that self-identified as using ADDs without requiring an inspection;
- How third parties can contribute to a successful enforcement if they have evidence of ADD use;
- Ambiguity in the wording of the September 2021 Aquaculture Code of Practice regarding already-deployed ADDs; and
- A need for publicly-released, periodic updates on Marine Scotland's ADD compliance works.

5.3 Actions taken by Marine Scotland

Process Diagram Revision

In response to our comments in the 3 March 2022 meeting, Marine Scotland provided an amended process diagram on 24 March 2022, which introduced a new action where offending sites will remain on a risk register with further monitoring in the event these are seen to be operating an ADD in the first inspection visit, but not at the time of the second visit (and where the operator has not submitted an EPS licence application or applied for

an exemption). This was deemed to largely address our concerns that these sites would fall to "no further action" in the original process diagram included in the Compliance Plan provided to ESS.

On 13 April 2022, Marine Scotland provided ESS a copy of a further revision to the process diagram, noting it had evolved "in response to our increased knowledge learned through undertaking inspections." This adds decision-making steps when an ADD is present but not in use (leaving the site on a risk register and subject to further monitoring) and allows inspected farms to be dropped to no further action when Marine Scotland officers confirm there is no ADD equipment present. ESS has not identified any outstanding concerns following review of the most recent process diagram, and therefore consider our queries regarding the process diagram to be reasonably resolved.

Strategy for the 13 fish farms self-reporting ADD use in 2021

In an email dated 16 May 2022, Marine Scotland described the geographical progression of inspections works to date and stated their aim to complete inspections of these 13 farms by the end of July 2022, subject to operational priorities. On 19 May 2022, Marine Scotland provided an additional update that they had completed unannounced inspections at six of these 13 farms, with no evidence of ADDs at any of the locations.

Marine Scotland's commitment to inspect all of these 13 farms and the target date for completion are considered sufficient to address our concerns that there was no specific strategy for these locations in the Compliance Plan. ESS will continue to monitor that this agreed task is completed by Marine Scotland.

Justification for not commencing enforcement at those 13 fish farms self-reporting ADD use in 2021 without inspections

In an email dated 16 May 2022, Marine Scotland stated:

"The survey of June 2021 pre-dated the monitoring and enforcement powers which were attached to the Code on 22 November 2021; therefore, it would not be appropriate to issue enforcement notices in relation to breach of the Code on the basis of these survey results, although these results have been taken into account in operational planning."

While ESS remains uncertain as to the validity of this stance, ESS note Marine Scotland's commitment to inspect all of these 13 farms (with an aim to complete these works by the end of July) will effectively resolve the issue.

Marine Scotland additionally confirmed that, post 22 November 2021, if any operator indicates or confirms that it is using an ADD without an EPS licence or without having demonstrated non-harm, they would issue an enforcement notice to that operator without requiring an inspection.

Addressing concerns over the difficulty for third parties to contribute to enforcement

When queried whether third-party evidence of ADD use could be sufficient for Marine Scotland to issue an enforcement notice without directly witnessing the ADD in use, Marine Scotland stated this could be done if they receive verifiable evidence; however they note this would be dependent on the quality of the evidence and would be dealt with on a case-by-case basis.

With regards to Marine Scotland failing to take enforcement action in the case of third-party evidence of ADD use (to which the representation contact expressed concerns), Marine Scotland explained that they had to carry out the investigation under the regulatory framework prevailing at the time of the recordings, which was the 1994 Regulations; their stance is that this legislation requires proof of an offence (disturbance to a species) to provide a legal basis for prosecution. Marine Scotland further explained that with the September 2021 Aquaculture Code of Practice becoming legally enforceable under the 2007 Fisheries Act, any submission of evidence of ADD use taken after November 2021 could allow Marine Scotland to pursue enforcement without proving harm to a protected species. As the Code of Practice legally requires operators to submit an EPS licence application or apply for an exemption if deploying an ADD, then evidence that the operator is using an ADD without having done either would allow Marine Scotland to more easily pursue enforcement, in their view.

ESS considers it unfortunate that the submission of ADD recordings by a third party did not lead to enforcement actions, as it was not contested that the farm being monitored was using an ADD without the benefit of an EPS licence at the time of recording. Irrespective of whether proof of disturbance was required to initiate enforcement at the time, ESS observe

that a new regime exists where proof of disturbance is no longer required. As such, ESS has not identified any further changes to the law or procedures beyond what has already been delivered.

It is not our role to act as an appeal body in respect of Marine Scotland's past investigation. Following Section 32(1) of UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021, ESS may not take action on "a failure to comply with environmental law arising out of any decision taken by a public authority in the exercise of its regulatory functions in relation to a particular person or case (for example, a decision on an application for a licence or a decision on regulatory enforcement in a specific case)." The outcome of Marine Scotland's investigation of submitted ADD recordings is considered to represent their decision on regulatory enforcement in a specific case. Should ESS become aware of repeat instances of non-enforcement in the future when a third party submits evidence of illegal ADD use, ESS could evaluate whether those trends indicate a failure to comply with environmental law or ineffectiveness of environmental law.

Confirmation that existing ADD deployments would be subject to enforcement

ESS noted that the wording in the September 2021 Aquaculture Code of Practice, which discusses the responsibilities of an operator who "plans to deploy an ADD", may be seen as ambiguous, as this might be interpreted by operators that they would be exempt from applying for a licence / exemption if they have already deployed an ADD.

Marine Scotland has confirmed than any operator found to be using an ADD, on or after 22 November 2021, without having obtained any relevant consents or without having demonstrated that the planned use will not harm marine mammals, would be issued an enforcement notice irrespective of the original date on which the ADD was deployed. ESS are satisfied with this approach and the confirmation that Marine Scotland do not view past ADD deployments as exempt.

Proposals for publishing public, periodic updates on their inspection works

In our discussions with Marine Scotland in March 2022, ESS explained its concerns that the Compliance Plan lacks proposed metrics or target milestones, which presented us with uncertainty whether meaningful change would occur in a reasonable timeframe. While Marine Scotland were willing to set a target date for the completion of the 13 farms which self-identified as using ADDs in 2021, they did not wish to set similar commitments to completion of the wider programme of inspections, citing that:

- The inspection process would be dynamic and responding to intelligence as it arrives;
- Marine Scotland maintain wider enforcement duties beyond ADDs and would prioritise assets to issues deemed the highest risk to the marine environment; and,
- Inspections would not proceed in unsafe nautical conditions, as these can be affected by weather conditions and seasons.

In lieu of a commitment to milestones or completion dates, then the next option for ESS to confirm Marine Scotland's compliance with their duties under environmental law and the effectiveness of their work would be to monitor their progress of inspections. ESS considers it would be additionally advantageous if Marine Scotland's periodic updates were made available to the public, so that concerned parties would be better informed on progress and the results of individual inspections.

In response to our request, Marine Scotland has committed to the following:

- Publishing individual inspection forms, which include: date of inspection, site name and ID, site description, if ADDs are present, type of ADDs present, signs of ADD use, and whether they interacted with site staff during inspections.
- Enforcement statistics / figures to accompany the inspection forms. The contents
 and how these would be presented were not fully finalised, but Marine Scotland
 provided examples of the content they were considering for inclusion.

Marine Scotland noted that they already publish information on EPS licence applications and granted licences on their portal here: http://marine.gov.scot/marine-licence-applications and gave examples of reporting statistics they have already published regarding marine and fisheries compliance (https://www.gov.scot/collections/marine-scotland-reporting-statistics/). Marine Scotland has indicated that the licence applications portal will include entries for any submissions from an operator seeking to demonstrate

that the planned ADD use will not harm EPS, along with Marine Scotland's determination on the submission.

ESS anticipates that these proposed updates will provide valuable transparency to Marine Scotland's approach in this area. ESS will monitor these updates and engage with Marine Scotland if ESS believe any further information is required.

Inspection Progress Updates

Verbal updates were given by Marine Scotland regarding inspection progress and findings in the meetings dated 25 March and 14 April 2022. On 24 May 2022, they provided additional details relating to inspections completed to date. In review of the data and commentary provided, ESS observes:

- 42 unique farms have been inspected to date in 2022.
- 50 inspections were completed (eight farms were subject to two inspection visits).
- ADDs were not detected in 34 of the inspections.
- ADDs were detected in the remaining 16 inspections (12 unique farms) but not operational at the time of inspection, with one exception.
- One fish farm was observed operating an ADD and Marine Scotland issued the operator an Enforcement Notice.

In previous clarifications provided to ESS, Marine Scotland noted that detection of ADDs was not limited to use of a hydrophone to detect ADD signals; Enforcement Officers were visually inspecting (and in some cases, boarding) the fish farm platforms to seek visual evidence of the presence of ADDs.

In review of the updates, ESS currently does not have any concerns with regards to the rate of progress of the inspections. The outcomes appear to indicate ADD use has largely been halted by the aquaculture industry, but the presence on non-operational ADDs being present on nearly 30% of the fish farms inspected will remain a risk for Marine Scotland to manage, in line with their Compliance Plan procedures.

Section 6: Conclusions

In recent years, there appears to have been a trend of increasing parliamentary and public scrutiny into the aquaculture sector's use of ADDs. When the representation was received in November 2021, this coincided with a series of changes in the legal framework supporting ADD enforcement and a shift in Marine Scotland's approach to securing compliance.

The representation presented concerns that Marine Scotland had not effectively prevented widespread use of unlicensed ADDs by allowing the aquaculture industry to self-regulate and by not actively pursuing enforcement. Soon after the representation was received, the law was tightened to prevent operators from using ADDs which they believed would not disturb EPS and therefore not require a licence – the legally enforceable Code of Practice requires the operator to demonstrate to Marine Scotland that the ADD would not disturb EPS before using the ADD. Approximately two months after the representation was received, Marine Scotland initiated inspections of fish farms near the Firth of Clyde and recently moved their inspections to a new geographical location. Early inspection results (50 visits to 42 unique fish farms completed to date in 2022) indicate a significant shift by the industry to abandon ADDs – no evidence of ADD equipment was observed in nearly 70% of the inspections. This is in strong contrast to ADD usage from the peak in 2018, where approximately 90% of fish farms were reported to be using ADDs.

ESS scrutinised Marine Scotland's Compliance Plan and supporting information to determine whether these are likely to provide an outcome which protects EPS in line with the requirements of the 1994 Regulations. ESS made recommendations for improvements to the Compliance Plan, which were completed and ESS deemed these to be satisfactory. ESS requested that Marine Scotland release public updates on the progress of their compliance works, to which they agreed. Following this, ESS considers informal resolution has been achieved, as Marine Scotland has taken reasonable corrective actions in response to our comments and ESS presently has no ongoing concerns on the design of the Compliance Plan and their proposed approach. ESS therefore does not consider it necessary to undertake formal investigation of Marine Scotland for these matters.

Ultimately, the effectiveness of the enforcement works and Marine Scotland's compliance with environmental law will be demonstrated through the actual delivery of the enforcement works. ESS will continue to monitor Marine Scotland's progress and the outcomes of the inspections.